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PCT09

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RAW SEQUENCE LISTING DATE: 01/14/2002
PATENT APPLICATION: US/09/890,463 TIME: 11:45:04

Input Set : A:\ES.txt
Output Set: N:\CRF3\01142002\I890463.raw

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  3 <110> APPLICANT: HOECH-GULDBERG, Ove
  4       DOVE, Sophie
  6 <120> TITLE OF INVENTION: PIGMENT PROTEIN FROM CORAL TISSUE
  8 <130> FILE REFERENCE: Q-65619
 10 <140> CURRENT APPLICATION NUMBER: 09/890,463
 11 <141> CURRENT FILING DATE: 2000-08-01
 13 <150> PRIOR APPLICATION NUMBER: PCT/AU00/00056
 14 <151> PRIOR FILING DATE: 2000-02-02
 16 <150> PRIOR APPLICATION NUMBER: PP8463
 17 <151> PRIOR FILING DATE: 1999-02-02
 19 <160> NUMBER OF SEQ ID NOS: 15
 21 <170> SOFTWARE: PatentIn version 3.1
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 5
 25 <212> TYPE: PRT
 26 <213> ORGANISM: Acropora aspera, Acropora horrida, Montipora caliculata, Porites
W--> 27 murrayensis, Montipora monasteriata and Porites lobata
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 32 1               5
 35 <210> SEQ ID NO: 2
 36 <211> LENGTH: 17
 37 <212> TYPE: PRT
 38 <213> ORGANISM: Acropora horrida
 40 <400> SEQUENCE: 2
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 43 1               5                   10                  15
 46 Val
 50 <210> SEQ ID NO: 3
 51 <211> LENGTH: 231
 52 <212> TYPE: PRT
 53 <213> ORGANISM: Acropora aspera
 55 <400> SEQUENCE: 3
 57 Ser Val Ile Ala Lys Gln Met Thr Tyr Lys Val Tyr Met Ser Gly Thr
 58 1               5                   10                  15
 61 Val Asn Gly His Tyr Phe Glu Val Glu Gly Asp Gly Lys Gly Lys Pro
 62             20                  25                  30
 65 Tyr Glu Gly Glu Gln Thr Val Arg Leu Ala Val Thr Lys Gly Gly Pro
 66         35                  40                  45
 69 Leu Pro Phe Ala Trp Asp Ile Leu Ser Pro Gln Cys Gln Tyr Gly Ser
 70     50                  55                  60
 73 Ile Pro Phe Thr Lys Tyr Pro Glu Asp Ile Pro Asp Tyr Val Lys Gln
 74 65                  70                  75                  80
 77 Ser Phe Pro Gly Arg Tyr Thr Trp Glu Arg Ile Met Asn Phe Glu Asp
 78                 85                  90                  95
 81 Gly Ala Val Cys Thr Val Ser Asn Asp Ser Ser Ile Gln Gly Asn Cys
 82             100                 105                 110
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85 Phe Ile Tyr His Val Lys Phe Ser Gly Leu Asn Phe Pro Pro Asn Gly
86         115                 120                 125
89 Pro Val Met Gln Lys Lys Thr Gln Gly Trp Glu Pro Asn Thr Glu Arg
90     130                 135                 140
93 Leu Phe Ala Arg Asp Gly Met Leu Ile Gly Asn Asn Phe Met Ala Leu
94 145                 150                 155                 160
97 Lys Leu Glu Gly Gly Gly His Tyr Leu Cys Glu Phe Lys Ser Thr Tyr
98                 165                 170                 175
101 Lys Ala Arg Lys Pro Val Lys Met Pro Gly Tyr His Tyr Val Asp Arg
102             180                 185                 190
105 Lys Leu Asp Val Thr Asn His Asn Lys Asp Tyr Thr Ser Val Glu Gln
106         195                 200                 205
109 Arg Glu Ile Ser Ile Ala Arg Lys Pro Leu Val Ala Cys Cys Phe Phe
110     210                 215                 220
113 Arg Val Lys Ser Arg His Lys
114 225                 230
117 <210> SEQ ID NO: 4
118 <211> LENGTH: 235
119 <212> TYPE: PRT
120 <213> ORGANISM: Acropora aspera
122 <400> SEQUENCE: 4
124 Ser Val Ile Ala Lys Gln Met Thr Tyr Lys Val Tyr Met Ser Gly Thr
125 1               5                   10                  15
128 Val Asn Gly His Tyr Phe Glu Val Glu Gly Asp Gly Lys Gly Lys Pro
129             20                  25                  30
132 Tyr Glu Gly Glu Gln Thr Val Arg Leu Ala Val Thr Lys Gly Gly Pro
133         35                  40                  45
136 Leu Pro Phe Ala Trp Asp Ile Leu Ser Pro Gln Cys Gln Tyr Gly Ser
137     50                  55                  60
140 Ile Pro Phe Thr Lys Tyr Pro Glu Asp Ile Pro Asp Tyr Val Lys Gln
141 65                  70                  75                  80
144 Ser Phe Pro Gly Arg Tyr Thr Trp Glu Arg Ile Met Asn Phe Glu Asp
145                 85                  90                  95
148 Gly Ala Val Cys Thr Val Ser Asn Asp Ser Ser Ile Gln Gly Asn Cys
149             100                 105                 110
152 Phe Ile Tyr His Val Lys Phe Ser Gly Leu Asn Phe Pro Pro Asn Gly
153         115                 120                 125
156 Pro Val Met Gln Lys Lys Thr Gln Gly Trp Glu Pro Asn Thr Glu Arg
157     130                 135                 140
160 Leu Phe Ala Arg Asp Gly Met Leu Ile Gly Asn Asn Phe Met Ala Leu
161 145                 150                 155                 160
164 Lys Leu Glu Gly Gly Gly His Tyr Leu Cys Glu Phe Lys Ser Thr Tyr
165                 165                 170                 175
168 Lys Ala Lys Lys Pro Val Lys Met Pro Gly Tyr His Tyr Val Asp Arg
169             180                 185                 190
172 Lys Leu Asp Val Thr Asn His Asn Lys Asp Tyr Thr Ser Val Glu Gln
173         195                 200                 205
176 Cys Glu Ile Ser Ile Ala Arg Lys Pro Val Val Ala Cys Arg Phe Phe
177     210                 215                 220
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Arg Val Lys Ser Arg His Lys Tyr Ala Val Ala
225 230 235

<210> SEQ ID NO: 5
<211> LENGTH: 841
<212> TYPE: DNA
<213> ORGANISM: Acropora aspera
<400> SEQUENCE: 5
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tactttgagg tcgaaggcga tggaaaagga aagccttacg agggggagca gacggtaagg 120
ctggctgtca ccaagggcgg acctctgcca tttgcttggg atattttatc accacagtgt 180
cagtacggaa gcataccatt caccaagtac cctgaagaca tccctgacta tgtaaagcag 240
tcattcccgg ggagatatac atgggagagg atcatgaact ttgaagatgg tgcagtgtgt 300
actgtcagca atgattccag catccaaggc aactgtttca tctaccatgt caagttctct 360
ggtttgaact ttcctcccaa tggacctgtt atgcagaaga agacacaggg ctgggaaccc 420
aacactgagc gtctctttgc acgagatgga atgctgatag gaaacaactt tatggctctg 480
aagttagaag gaggtggtca ctatttgtgt gaattcaaat ctacttacaa ggcaaggaag 540
cctgtgaaga tgccagggta tcactatgtt gaccgcaaac tggatgtaac caatcacaac 600
aaggattaca cttccgttga gcagcgtgaa atttccattg cacgcaaacc tttggtcgcc 660
tgctgttttt tcagagtcaa atcaaggcac aaataagcag tggcgtaaaa aacgtagatt 720
ctgattttag cttagagaag taggaacgaa gaagtgtaga caaccttcaa tgattaaact 780
tttgaaaaca acsccaaaaa aaaaaaaaaa aaaaaaaaaa aaaaagcggc cgctcgaatt 840
a 841

<210> SEQ ID NO: 6
<211> LENGTH: 841
<212> TYPE: DNA
<213> ORGANISM: Acropora aspera
<400> SEQUENCE: 6
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tactttgagg tcgaaggcga tggaaaagga aagccttacg agggggagca gacggtaagg 120
ctggctgtca ccaagggcgg acctctgcca tttgcttggg atattttatc accacagtgt 180
cagtacggaa gcataccatt caccaagtac cctgaagaca tccctgacta tgtaaagcag 240
tcattcccgg ggagatatac atgggagagg atcatgaact ttgaagatgg tgcagtgtgt 300
actgtcagca atgattccag catccaaggc aactgtttca tctaccatgt caagttctct 360
ggtttgaact ttcctcccaa tggacctgtt atgcagaaga agacacaggg ctgggaaccc 420
aacactgagc gtctctttgc acgagatgga atgctgatag gaaacaactt tatggctctg 480
aagttagaag gaggtggtca ctatttgtgt gaattcaaat ctacttacaa ggcaaagaag 540
cctgtgaaga tgccagggta tcactatgtt gaccgcaaac tggatgtaac caatcacaac 600
aaggattaca cttccgttga gcagtgtgaa atttccattg cacgcaaacc tgtggtcgcc 660
tgccgttttt tcagagtcaa atcaaggcac aaatacgcag tggcgtaaaa aacgtagatt 720
ctgattttag cttatagaag taggaacgaa gaagtgtaaa caaccattaa tgattaaact 780
tttgaaaaca acgccataaa aaaaaaaaaa aaaaaaaaaa aaaaagcggc cgctcgaatt 840
a 841

<210> SEQ ID NO: 7
<211> LENGTH: 18
<212> TYPE: PRT
<213> ORGANISM: Acropora aspera, Montipora caliculata and Porites murrayensis
<400> SEQUENCE: 7
Ser Val Ile Ala Lys Gln Met Thr Tyr Lys Val Tyr Met Ser Gly Thr
1 5 10 15

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Input Set : A:\ES.txt
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269 Val Asn
273 <210> SEQ ID NO: 8
274 <211> LENGTH: 25
275 <212> TYPE: PRT
276 <213> ORGANISM: Porites lobata
278 <400> SEQUENCE: 8
280 Ser Val Ile Ala Lys Gln Met Thr Tyr Lys Val Tyr Met Ser Gly Thr
281 1               5                  10                  15
284 Val Asn Asn His Tyr Glu Phe Val Thr
285             20                  25
288 <210> SEQ ID NO: 9
289 <211> LENGTH: 225
290 <212> TYPE: PRT
291 <213> ORGANISM: Discosoma sp.
293 <400> SEQUENCE: 9
295 Met Arg Ser Ser Lys Asn Val Ile Lys Glu Phe Met Arg Phe Lys Val
296 1               5                  10                  15
299 Arg Met Glu Gly Thr Val Asn Gly His Glu Phe Glu Ile Glu Gly Glu
300             20                  25                  30
303 Gly Glu Gly Arg Pro Tyr Glu Gly His Asn Thr Val Lys Leu Lys Val
304         35                  40                  45
307 Thr Lys Gly Gly Pro Leu Pro Phe Ala Trp Asp Ile Leu Ser Pro Gln
308     50                  55                  60
311 Phe Gln Tyr Gly Asn Lys Val Tyr Val Lys His Pro Ala Asp Ile Pro
312 65                  70                  75                  80
315 Asp Tyr Lys Lys Leu Ser Phe Pro Glu Gly Phe Lys Trp Glu Arg Trp
316                 85                  90                  95
319 Met Asn Phe Glu Asp Gly Gly Val Val Thr Val Thr Gln Asp Ser Ser
320             100                 105                 110
323 Leu Gln Asp Gly Cys Phe Ile Tyr Lys Val Lys Phe Ile Gly Val Asn
324         115                 120                 125
327 Phe Pro Ser Asp Gly Pro Val Met Gln Lys Lys Thr Met Gly Trp Glu
328     130                 135                 140
331 Ala Ser Thr Lys Arg Leu Tyr Pro Arg Asp Gly Val Leu Lys Gly Glu
332 145                 150                 155                 160
335 Ile His Lys Ala Leu Lys Leu Lys Asp Gly Gly His Tyr Leu Val Glu
336                 165                 170                 175
339 Phe Lys Ser Ile Tyr Met Ala Lys Lys Pro Val Gln Leu Pro Gly Tyr
340             180                 185                 190
343 Tyr Tyr Val Asp Ser Lys Leu Asp Ile Thr Ser His Asn Glu Asp Tyr
344         195                 200                 205
347 Thr Ile Val Glu Gln Tyr Glu Arg Thr Glu Gly Arg His His Leu Phe
348     210                 215                 220
351 Leu
352 225
355 <210> SEQ ID NO: 10
356 <211> LENGTH: 230
357 <212> TYPE: PRT
358 <213> ORGANISM: Discosoma sp.
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RAW SEQUENCE LISTING DATE: 01/14/2002
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Input Set : A:\ES.txt
Output Set: N:\CRF3\01142002\I890463.raw

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360 <400> SEQUENCE: 10
362 Met Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu Val
363 1               5                   10                  15
366 Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly Glu
367             20                  25                  30
370 Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile Cys
371         35                  40                  45
374 Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr Phe
375     50                  55                  60
378 Ser Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys Arg
379 65                  70                  75                  80
382 His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu Arg
383                 85                  90                  95
386 Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu Val
387             100                 105                 110
390 Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly Ile
391         115                 120                 125
394 Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr Asn
395     130                 135                 140
398 Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn Gly
399 145                 150                 155                 160
402 Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser Val
403                 165                 170                 175
406 Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly Pro
407             180                 185                 190
410 Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu Ser
411         195                 200                 205
414 Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Glu Phe Val
415     210                 215                 220
418 Thr Ala Ala Gly Ile Thr
419 225                 230
422 <210> SEQ ID NO: 11
423 <211> LENGTH: 20
424 <212> TYPE: DNA
C--> 425 <213> ORGANISM: Artificial
427 <220> FEATURE:
428 <221> NAME/KEY: misc_feature
429 <223> OTHER INFORMATION: PCR Primers
432 <400> SEQUENCE: 11
433 tccgttatcg ctaaacagat                                          20
436 <210> SEQ ID NO: 12
437 <211> LENGTH: 20
438 <212> TYPE: DNA
C--> 439 <213> ORGANISM: Artificial
441 <220> FEATURE:
442 <221> NAME/KEY: misc_feature
443 <223> OTHER INFORMATION: PCR Primers
446 <400> SEQUENCE: 12
447 tttgtgcctt gatttgactc                                          20
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VERIFICATION SUMMARY DATE: 01/14/2002
PATENT APPLICATION: **US/09/890,463** TIME: 11:45:05

Input Set : **A:\ES.txt**
Output Set: **N:\CRF3\01142002\I890463.raw**

L:27 M:259 W: Allowed number of lines exceeded, <213> ORGANISM:
L:425 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:11
L:439 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:12
L:453 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:13
L:467 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:14
L:481 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:15